UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/572,856	03/22/2006	Hiroshi Ishibuchi	SAA-008	9237
32628 7590 03/09/2009 KANESAKA BERNER AND PARTNERS LLP 1700 DIAGONAL RD SUITE 310 ALEXANDRIA, VA 22314-2848			EXAMINER	
			NGUYEN, PHONG H	
			ART UNIT	PAPER NUMBER
			3724	
			MAIL DATE	DELIVERY MODE
			03/09/2009	PAPER

## Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
	10/572,856	ISHIBUCHI ET AL.
Office Action Summary	Examiner	Art Unit
	PHONG H. NGUYEN	3724
The MAILING DATE of this communication ap Period for Reply	opears on the cover sheet with the	correspondence address
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING IT  Extensions of time may be available under the provisions of 37 CFR 1 after SIX (6) MONTHS from the mailing date of this communication.  If NO period for reply is specified above, the maximum statutory period.  Failure to reply within the set or extended period for reply will, by statu Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATIO .136(a). In no event, however, may a reply be tid will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDONE	N. mely filed  the mailing date of this communication. ED (35 U.S.C. § 133).
Status		
Responsive to communication(s) filed on 13 in 2a) This action is <b>FINAL</b> .      Since this application is in condition for allowed closed in accordance with the practice under	is action is non-final. ance except for formal matters, pr	
Disposition of Claims		
4) Claim(s) 28-30 is/are pending in the application 4a) Of the above claim(s) is/are withdress 5) Claim(s) is/are allowed. 6) Claim(s) 28-30 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/ Application Papers 9) The specification is objected to by the Examin	awn from consideration.  for election requirement.	
10)☑ The drawing(s) filed on 22 March 2006 is/are:  Applicant may not request that any objection to the Replacement drawing sheet(s) including the corre  11)☐ The oath or declaration is objected to by the E	e drawing(s) be held in abeyance. Se ction is required if the drawing(s) is ob	ne 37 CFR 1.85(a). Dijected to. See 37 CFR 1.121(d).
Priority under 35 U.S.C. § 119		
12) Acknowledgment is made of a claim for foreig a) All b) Some * c) None of:  1. Certified copies of the priority documer 2. Certified copies of the priority documer 3. Copies of the certified copies of the pri application from the International Burea * See the attached detailed Office action for a list	nts have been received. nts have been received in Applicat ority documents have been receiv au (PCT Rule 17.2(a)).	ion No ed in this National Stage
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4)  Interview Summary Paper No(s)/Mail D 5)  Notice of Informal I 6)  Other:	ate

Application/Control Number: 10/572,856 Page 2

Art Unit: 3724

## **DETAILED ACTION**

1. In view of a new found prior art, the allowable subject matter of claim 28 is withdrawn.

## Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hideo (JP2002-284,430) in view of Welch (4,809,573).

Regarding claim 28, Hideo teaches a method of cutting off a web having a basic weight and being fed at a web feeding speed between a preceding knife cylinder 2 that carries on a peripheral surface thereof a preceding knife 8 and a following knife cylinder 3 that carries on a peripheral surface thereof a following knife 9, said method comprising:

determining an amount of cutting torque (Txa+Txb) necessary for the knives to cut off the web, based on the basic weight and the feeding speed of the web (it is to be noted the web has a certain weight and moves with a certain speed and is cut by the knives. Therefore, a specific a mount of torque is generated based on the web's weight and speed.); and

while the web is being cut, driving the following knife and the preceding knife respectively with a first torque component Txa and a second torque component Txb of the cutting torque in the direction in which the preceding knife and the following knife are pressed against each other;

wherein the first torque component Txa and the second torque component Txb have opposite signs (the knife cylinders press against each other; therefore, the torque component have opposite signs).

See Fig. 1.

Hideo does not teach varying the first torque component and the second torque component during a cutting process.

Welch teaches varying torque during a cutting process for making proper cuts on a web. See Fig. 3.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to vary the first torque component and the second torque component during a cutting process as taught by Welch for making proper cuts on the web.

Regarding claims 29 and 30, the modified method of cutting off a web of Hideo does not teach a specific torque pattern. At the time the invention was made, finding a specific torque pattern for cutting a web is merely to do repeating experiments.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to do repeating experiments to obtain the claimed torque pattern in claims 29 and 30.

Application/Control Number: 10/572,856 Page 4

Art Unit: 3724

## Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHONG H. NGUYEN whose telephone number is (571)272-4510. The examiner can normally be reached on Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Boyer Ashley can be reached on 571-272-4502. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. H. N./ Examiner, Art Unit 3724 March 5, 2009